

## Anno Accademico 2019/2020

TISSUE ENGINEERING	
Enrollment year	2018/2019
Academic year	2019/2020
Regulations	DM270
Academic discipline	ING-INF/06 (ELECTRONIC AND INFORMATION BIOENGINEERING)
Department	DEPARTMENT OF ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING
Course	BIOENGINEERING
Curriculum	Bioingegneria delle cellule e dei tessuti
Year of study	2°
Period	1st semester (30/09/2019 - 20/01/2020)
ECTS	6
Lesson hours	45 lesson hours
Language	Italian
Activity type	WRITTEN AND ORAL TEST
Teacher	FASSINA LORENZO (titolare) - 6 ECTS
Prerequisites	None.
Learning outcomes	One of the fundamental purposes of Tissue Engineering and Regenerative Medicine is to "build" implantable substitutes of tissues and organs. This course will provide an overview of normal tissues and organs and Tissue Engineering strategies to heal their damage. Lectures are supplemented by laboratory experiments.
Course contents	Biology of the cell and of the extracellular matrix. Anatomy, physiology, and substitutes of the following tissues and organs: - skin - bone - cartilage - skeletal muscle

	<ul> <li>nerve</li> <li>arterial blood vessel</li> <li>pancreas</li> <li>liver</li> <li>kidney</li> <li>heart muscle.</li> <li>Stereology.</li> <li>Laboratory techniques in Tissue Engineering.</li> </ul>
Teaching methods	Lectures (hours/year in lecture theatre): 45 Practical class (hours/year in lecture theatre): 0 Practicals / Workshops (hours/year in lecture theatre): 0
Reccomended or required readings	On Kiro.
Assessment methods	Oral exam.
Further information	Oral exam.
Sustainable development goals - Agenda 2030	<u>\$Ibl_legenda_sviluppo_sostenibile_</u>